estrogen surface receptor-mediated response in said cell in said estrogen surface receptor-specific manner is inhibited by tamoxifen and indicates that said test molecule is said estrogen surface receptor agonist.

38. (Amended Once) The method of claim 33, wherein said determining step comprises measuring nitric oxide release from said cell.

39. (Amended Once) The method of claim 33, wherein said determining step comprises measuring intracellular calcium levels within said cell.

40. (Amended Once) The method of claim 33, wherein said determining step comprises measuring nitric oxide release from said cell and measuring intracellular calcium levels in said cell.

In the abstract:

Please add the following Abstract after the claims:

--ABSTRACT

The present invention relates generally to mu3 opiate receptors, cannabinoid receptors, and estrogen surface receptors (ESRs). Specifically, the invention provides methods and materials for identifying mu3 opiate receptor agonists and antagonists, cannabinoid receptor agonists and antagonists, and ESR agonists and antagonists. In addition, the invention provides an isolated nucleic acid molecule that encodes a mu3 opioid receptor, and an isolated mu3 opoid receptor polypeptide. Further, the invention provides methods and materials for treating cancers, inflammatory conditions, sepsis conditions, viral infections, and cardiovascular diseases.--